TC-W365

SERVICE MANUAL



US Model Canadian Model AEP Model E Model Australian Model

"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

System

Recording system

4-track 2-channel stereo

Fast-winding time (approx.)

120 sec. (with Sony C-60 cassette)

Bias AC bia

Signal-to-noise ratio (at peak level and weighted with Dolby NR off)

Type I tape, Sony Type I (NORMAL): 55 dB Type II tape, Sony Type II (HIGH): 57 dB Type IV tape, Sony Type IV (METAL): 58 dB

S/N ratio improvement (approximate values)

With Dolby B NR on: 5 dB at 1 kHz, 10 dB at 5 kHz With Dolby C NR on: 15 dB at 500 Hz, 20 dB at 1 kHz

Harmonic distortion

0.4% (with Type I tape, Sony Type I (NORMAL): 160 nWb/m 315 Hz, 3rd H.D.) 1.8% (with Type IV tape, Sony Type IV (METAL): 250 nWb/m 315 Hz, 3rd H.D.)

Frequency response (Dolby NR off)

(HIGH): 30 - 14,000 Hz (±3 dB, IEC) Type II tape, Sony Type II (HIGH): 30 - 14,000 Hz (±3 dB, IEC)

Model Name Using Similar N	TC-W345	
Tape Transport	DECK-A	TCM-180VA-H6
Mechanism Type	DECK-B	TCM-180VB-H6

SPECIFICATIONS

Type IV tape, Sony Type IV (METAL): 30 - 15,000 Hz (±3 dB, IEC), 30 - 13,000 Hz (±3 dB, -4 dB recording)

Wow and flutter

±0.16 % W. Peak (IEC) 0.11 % W. RMS (NAB) ±0.2 % W. Peak (DIN)

Inputs

Line inputs (phono jacks)

Sensitivity: 0.16 V Input impedance: 47 kilohms

Outputs

Line outputs (phono jacks)

Rated output level: 0.5 V at a load impedance of 47 kilohms Load impedance: Over 10 kilohms

Headphones (stereo phone jack)

Output level: 1 mW at a load impedance of 32 ohms

General

Power requirements

Where purchased	Power requirements		
U.S.A. and Canada	120 V AC, 60 Hz		
Continental Europe	220 - 230 V AC, 50/60 Hz		
Australia	240 V AC, 50/60 Hz		
Other countries	120/220/240 V AC, 50/60 Hz		

Power consumption

18 W

Dimensions (approx.) (w/h/d)

 $430 \times 125 \times 285$ mm (w/h/d) $(17 \times 5 \times 11^4/4$ inches) including projecting parts and controls

Mass (approx.)

3.7 kg (8 lbs 3 oz)

Supplied accessories

Audio connecting cords,(2 phono plugs - 2 phono plugs) (2)

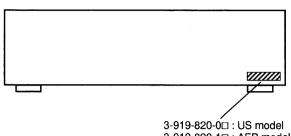
Design and specifications are subject to change without notice.



MODEL IDENTIFICATION

— BACK PANEL —

Section



3-919-820-1□: AEP model 3-919-820-2□: E model 3-919-820-3□: Australian model 3-919-820-4□: Canadian model

Daga

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

(US model only)

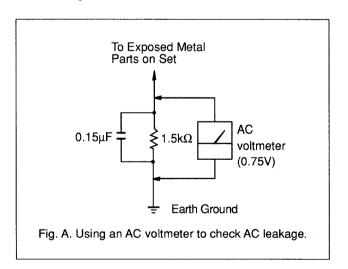
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

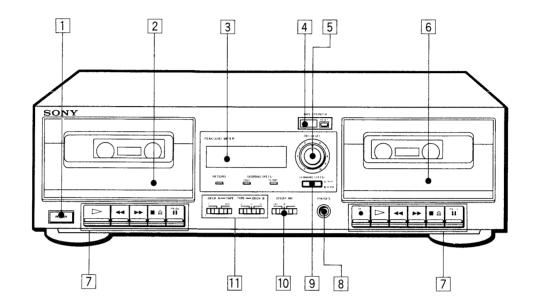


ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE A SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

Identification of Front Panel Parts



- 1 POWER switch
- 2 Cassette holder (deck A)
- **3 PEAK LEVEL METER**
- 4 TAPE COUNTER and RESET button
- 5 REC (recording) LEVEL control
- 6 Cassette holder (deck B)
- **7** Tape operation buttons
 - REC (record) button (deck B only)
 - ⊳ (play) button
 - (rewinding) button
 - ▶► (fast-forward) button
 - ■▲ (stop) and (eject) button
 - II PAUSE button
- **8 HEADPHONES jack (stereo phone jack)**
- 9 DUBBING SPEED button HIGH/NORMAL speed button
- 10 DOLBY NR (Dolby noise reduction) buttons
- 11 TAPE TYPE SELECT switches

SECTION 2

MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcoholmoistened swab:

> record/playback head erase head capstan

pinch roller rubber belt idler

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30 — 70 g • cm (0.42 — 0.97 oz • inch)
FWD Back tension	CQ-102C	1.5 — 5.5 g • cm (DECK A) (0.020 — 0.076 oz • inch) 1.5 — 7 g • cm (DECK B) (0.020 — 0.096 oz • inch)
FF, REW	CQ-201B	60 g • cm or more (0.87 oz • inch or more)

SECTION 3

ELECTRICAL ADJUSTMENTS

- 1. Demagnetize the record/playback with a head demagnetizer.
- 2. Do not use a magnetized screwdriver for the adjustments.
- 3. After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- 5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- The adjustments should be performed for both L-CH and R-
- Switches and control should be set as follows unless otherwise specified.

DOLBY NR switch

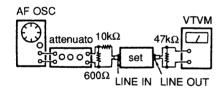
: OFF TAPE TYPE switch

: TYPE 1 (NORMAL)

Rec Level

: min

Mode: record



Standard Input Level

	LINE IN
source impedance	10kΩ
input level	0.5V (-3.8dB)

Standard Output Level

	LINE OUT
load impedance	47kΩ
output level	0.5V (-3.8dB)

Test Tape

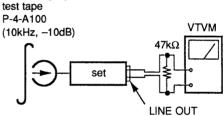
Таре	Contents	Use
P-4-A100 P-4-L300 WS-48B	10kH, -10dB 315Hz, 0dB 3kHz, 0dB	Azimuth Adjustment PB Level Adjustment Tape Speed Adjustment

0dB=0.775V

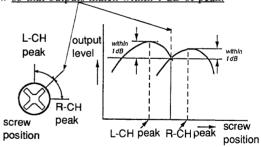
RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT DECK A DECK B

Procedure:

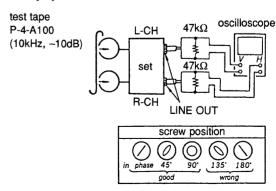
1. Mode: FWD playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.

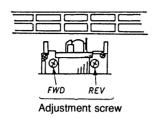


3. Mode: play back



4. After the adjustments, appy suitable locking compound to the parts adjusted.

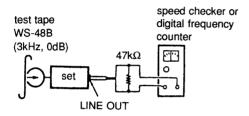
Adjustment Location:



TAPE SPEED ADJUSTMENT DECK A DECK B

Procedure:

Mode: FWD playback



1. Connect pin to with the lead wire. (CNP505)

Measurement Limit: high speed

Speed checker	Digital trequency counter
$0 \pm 0.3\%$	$6,000 \pm 20$ Hz

Adjustment location:

DECK-A side RV501 DECK-B side RV503

2. Remove the wire in step 1. (CNP505)

Measurement Limit: normal speed

Speed checker	Digital frequency counter
0 ± 0.3%	3,000 ± 10Hz

Adjustment Location:

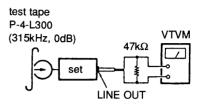
DECK-A side RV502 DECK-B side RV504

3. If the specifications are not satisfied, repeat step 1 and 2.

PLAYBACK LEVEL ADJUSTMENT DECK A DECK B

Procedure:

Mode: FWD playback



Adjust,

Deck A is RV101 (L-CH) and RV201 (R-CH), Deck B is RV102 (L-CH) and RV202 (R-CH) so that the adjustment within measurement limit as follows.

Measurement Limit:

LINE OUT level : $-7.7dB \pm 0.5dB$ (0.30 to 0.34V) level difference between the channels : within 0.5dB.

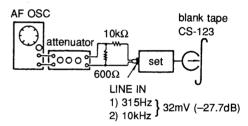
RECORD BIAS ADJUSTMENT DECK B

Setting:

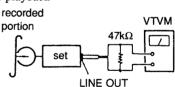
TAPE SELECT: TYPE-I (DECK-B)

Priocedure :

1. Mode: record



2. Mode: playback



Play the tape recorded in step 1. If the specification is not satisfied, adjust RV151 (L-CH), RV251 (R-CH) and repeat steps 1 and 2.

Measurement Limit:

The LINE OUT level of 10kHz signal relative to that of 315Hz:-0.5dB to 0.5dB.

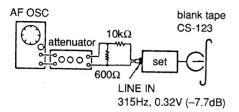
RECORD GAIN ADJUSTMENT DECK B

Setting:

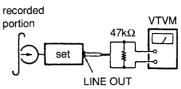
TAPE SELECT: TYPE-I (DECK-B)

Priocedure:

1. Mode: record



2. Mode: playback



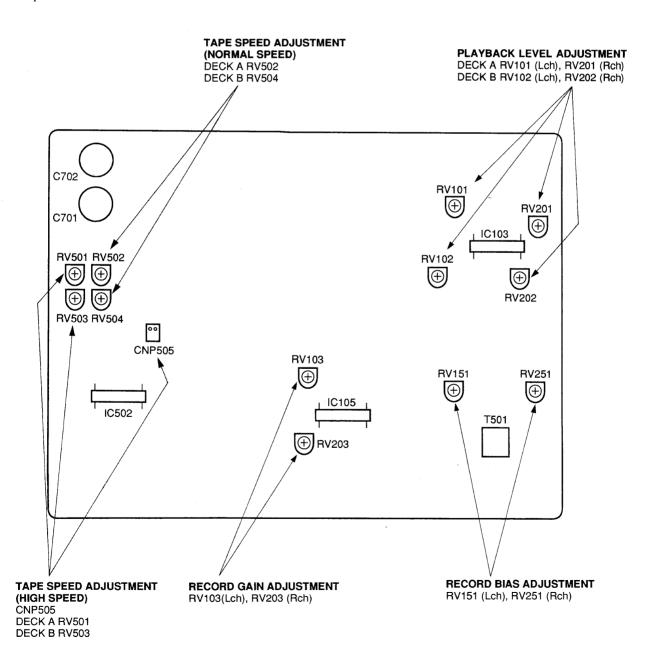
play the recorded in step 1. If the specification is not satisfied, adjust RV103 (L-CH), RV203 (R-CH) and repeat steps 1 and 2.

Measurement Limit:

LINE OUT level: -7.7dB to 0.5dB (0.30 to 0.34V)

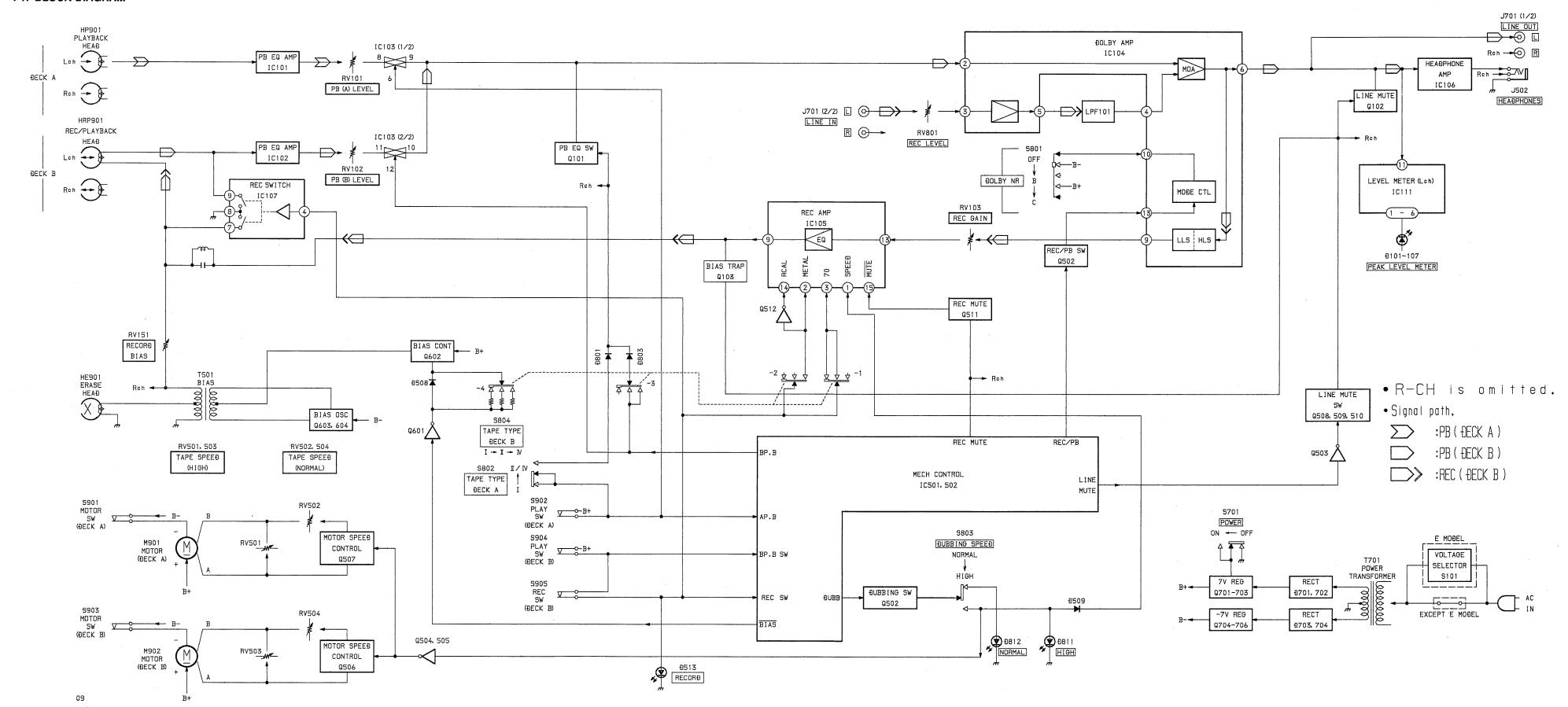
Adjustment Location: Main Board (1/5)

— Component Side —

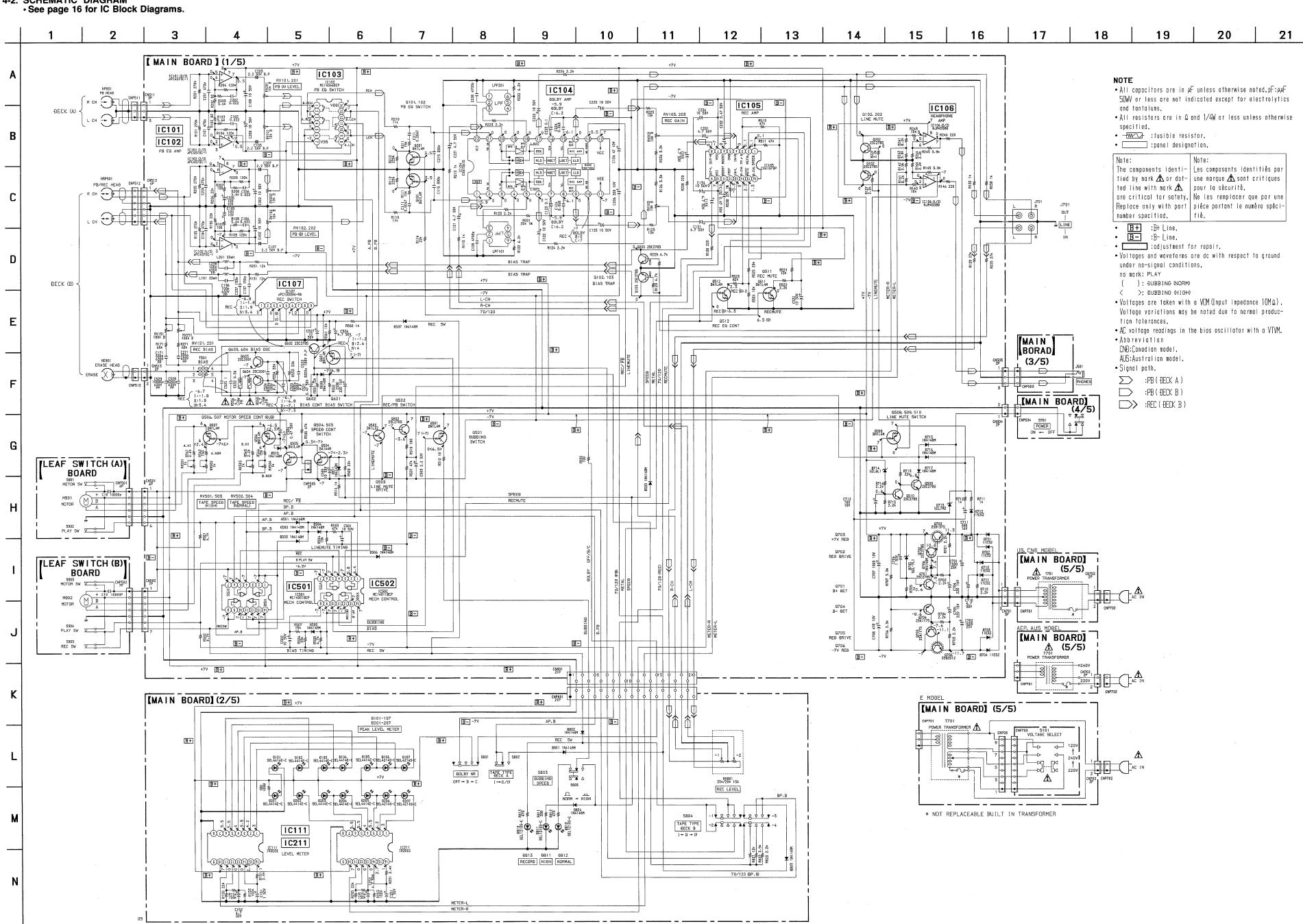


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM

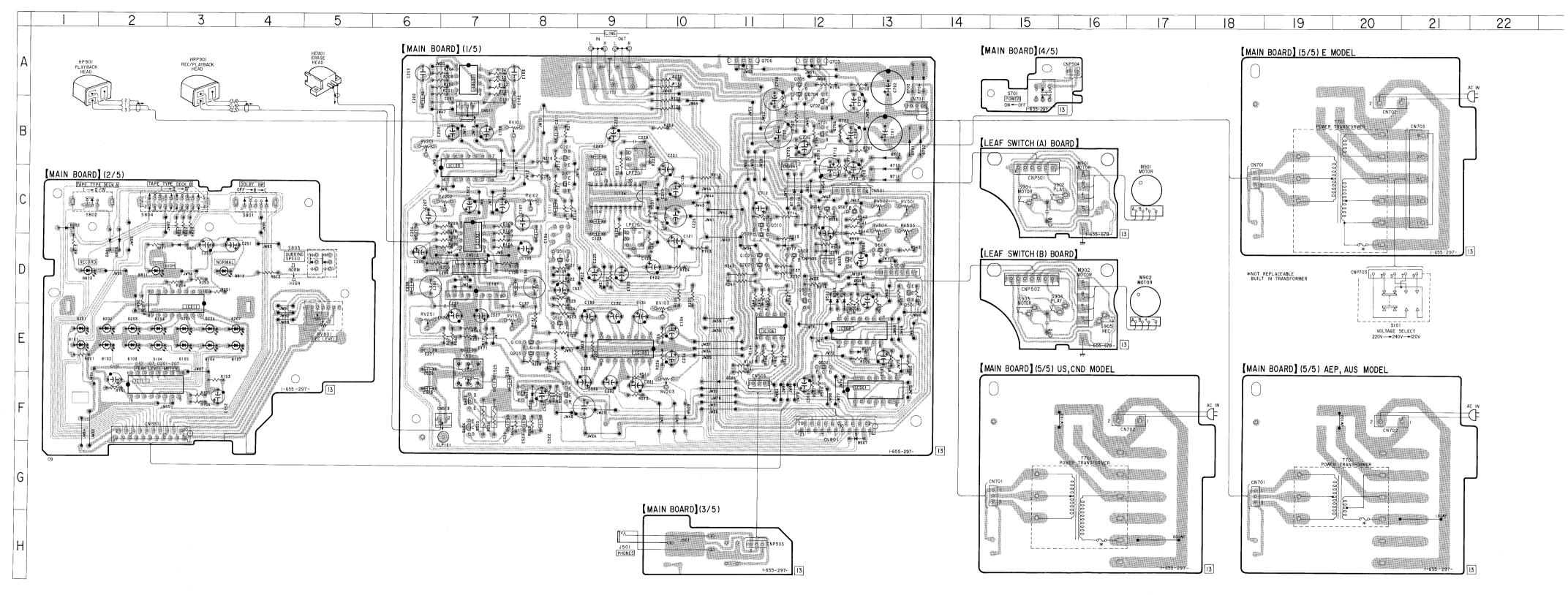


4-2. SCHEMATIC DIAGRAM



Ref. No.	Location	Ref. No.	Location
D101 D102	E-1 E-2 E-2	D812 D813	D-2 D-3
D103 D104 D105 D106 D107 D201 D202 D203 D204 D205 D206 D207 D501	E-2 E-3 E-3 E-4 E-1 E-2 E-2 E-2 E-3 E-3 E-4 D-13	IC101 IC102 IC103 IC104 IC105 IC106 IC107 IC111 IC211 IC501 IC502	A-7 D-7 C-9 E-9 E-11 D-7 F-2 E-3 F-13 E-12
D502 D503 D503 D504 D505 D506 D507 D508 D509 D510 D511 D701 D702 D703 D704 D705 D706 D710 D711 D712 D713 D714 D715 D716 D717 D801 D801 D803 D804 D804 D801	D-12 D-12 D-12 E-13 F-11 F-13 F-8 F-10 D-12 B-13 B-13 A-13 B-12 C-13 B-12 C-12 D-12 D-12 D-12 D-12 D-12 D-12 D-12 D	Q101 Q102 Q103 Q201 Q202 Q203 Q501 Q502 Q503 Q504 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q602 Q603 Q604 Q701 Q702 Q703 Q704 Q706	C-8 D-11 E-8 B-8 D-11 E-8 D-12 D-12 D-12 D-12 C-11 D-8 E-8 F-7 B-12 B-12 A-12 A-11

4-3. PRINTED WIRING BOARD

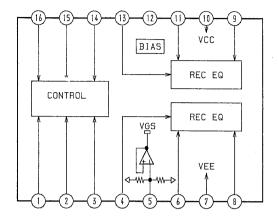


Note:

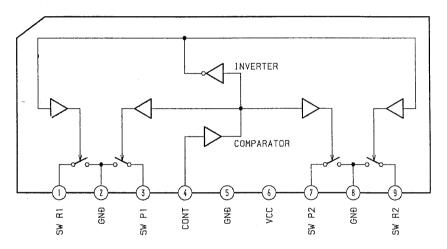
- o---: parts extracted from the component side.
- Pattern from the side which enable seeing.
- Abbreviation
- CND : Canadian model. AUS : Australian model.

4-4. IC BLOCK DIAGRAMS

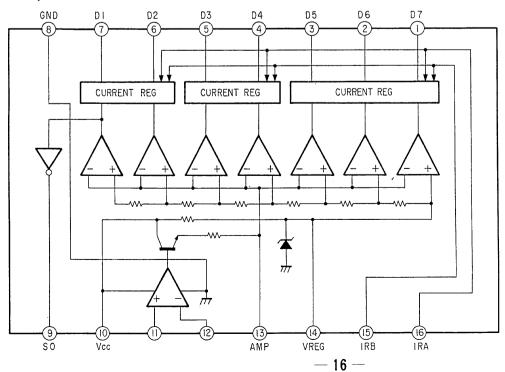
IC105 CXA1579P



IC107 μPC1330HA-NA



IC111,211 IR2E02



SECTION 5 EXPLODED VIEWS

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation

CND : Canadian model
AUS : Australian model

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

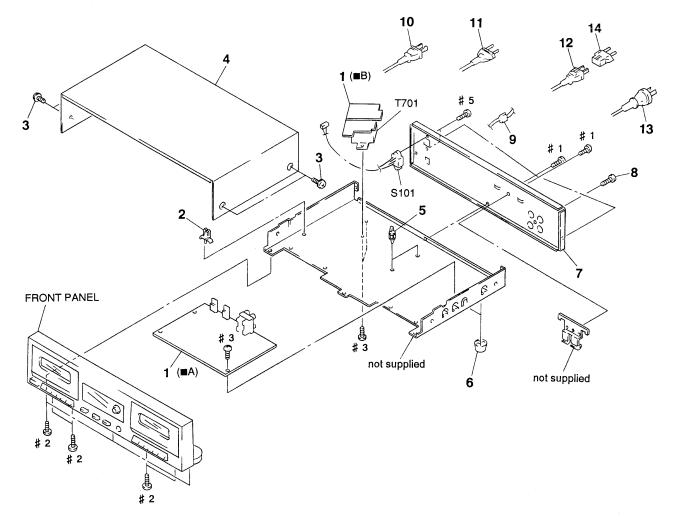
Replace only with part number specified.

Les composants identifiés par une marque <u>A</u> sont critiques pour la sécurité.

Ne les remplacer que par une piéce portant le numéro spécifié.

5-1. CASE SECTION

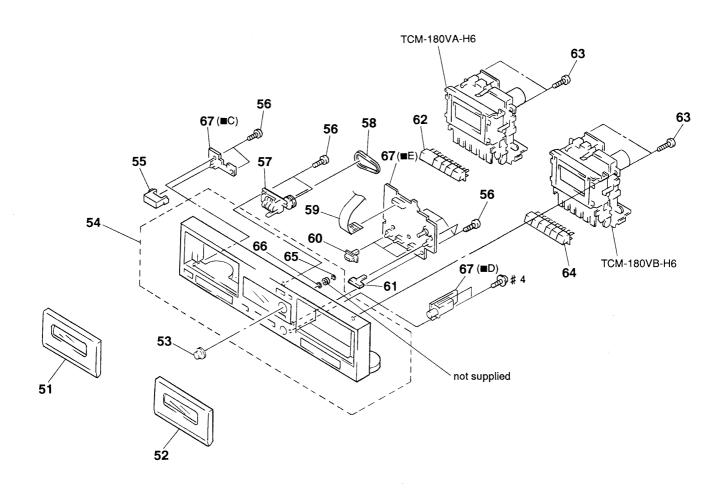
NOTE: A, B, C, D and E are supplied as MAIN board.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1 * 1	A-2007-308-A	MAIN BOARD, COMPLETE (US, CND) MAIN BOARD, COMPLETE (AEP)		8		SCREW (BV/RING)	
* 1 * 1 2		MAIN BOARD, COMPLETE (AUS) MAIN BOARD, COMPLETE (E) CLAMP, CORD		* 9 9 <u>1</u> 10	3-703-571-11 1-558-945-21	BUSHING (2104), CORD (AEP, AUS) BUSHING (S) (4516), CORD (US, CND, E) CORD, POWER (POLAR, SPT-1) (US, CND)	
3 * 4	3-363-099-01 4-943-088-41	SCREW (CASE 3 TP2) CASE		<u>↑</u> 11 <u>↑</u> 12		CORD, POWER (AEP) CORD, POWER (E)	
* 5 6 * 7	4-930-848-01			<u>↑</u> 13 <u>↑</u> 14	1-569-007-11	CORD, POWER (AUS) ADAPTER, CONVERSION 2P (E)	
* 7	3-919-820-11			⚠S101 ⚠T701 ⚠T701	1-427-777-11	SELECTOR, POWER VOLTAGE (E) TRANSFORMER, POWER (US, CND) TRANSFORMER, POWER (AEP, AUS)	
* 7 * 7 * 7	3-919-820-21 3-919-820-31 3-919-820-41	PANEL, BACK (AUS)		⚠ T701		TRANSFORMER, POWER (E)	

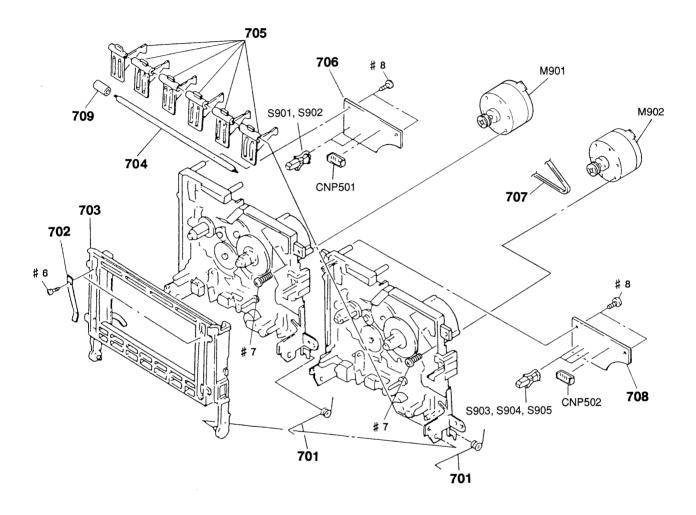
5-2. FRONT PANEL SECTION

NOTE: \blacksquare A, \blacksquare B, \blacksquare C, \blacksquare D and \blacksquare E are supplied as MAIN board.



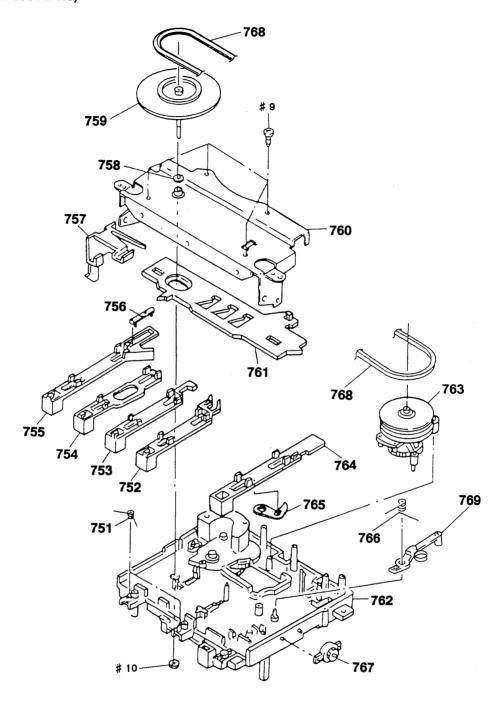
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51 52 53 54 54	X-3369-526-1 3-909-661-01 X-3369-527-1	LID (A) ASSY, CASSETTE LID (B) ASSY, CASSETTE KNOB (REC) PANEL ASSY, FRONT (US, CND) PANEL ASSY, FRONT (AEP, E, AUS)		61 62 63 64	4-951-620-11	BUTTON (DB) BUTTON (BLOCK A) SCREW (2.6X10), +BVTP BUTTON (BLOCK B)	
55 56 57 58 59	3-354-932-01 4-951-620-01 1-548-596-61 3-453-112-00	BUTTON (POWER) SCREW (2.6X8), +BVTP COUNTER, TAPE (MIDDLE TYPE) BELT (CAPSTAN) WIRE (FLAT TYPE) (21 CORE)		65 66 * 67 * 67 * 67	3-701-437-11 A-2007-307-A A-2007-308-A A-2007-309-A	MAIN BOARD, COMPLETE (US, CND) MAIN BOARD, COMPLETE (AEP) MAIN BOARD, COMPLETE (AUS)	
60	3-919-806-01	KNOB (SL)		* 67	A-2007-392-A	MAIN BOARD, COMPLETE (E)	

5-3. MECHANISM DECK SECTION 1 (DECK A: TCM-180VA-H6) DECK B: TCM-180VB-H6)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
701 702 703 704 705	3-358-209-01 3-358-266-02 3-371-917-01	SPRING (LOADING A), TORSION SPRING (CASSETTE HOLDER), LEAF HOLDER, CASSETTE SHAFT (BUTTON SHAFT 4) LEVER (BUTTON BASE D)		M901 M902 S901	X-3358-212-1 X-3358-212-1 1-571-736-11	PIN, CONNECTOR 7P MOTOR (A) ASSY (DECK A) MOTOR (B) ASSY (DECK B) SWITCH, LEAF (MOTOR) SWITCH, LEAF (PLAY)	
* 706 707 * 708 * 709 * CNP501	3-358-272-01 1-655-679-13 3-358-216-01	LEAF SWITCH (A) BOARD BELT (A2) LEAF SWITCH (B) BOARD COLLAR (DECK A) PIN, CONNECTOR 6P		S903 S904 S905	1-571-736-11 1-571-736-11 1-571-736-11	SWITCH, LEAF (PLAY)	

5-4. MECHANISM DECK SECTION 2 (DECK A: TCM-180VA-H6) DECK B: TCM-180VB-H6)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
751 752 753 754 755	3-358-258-01 3-358-257-01 3-358-256-01		V.	* 761 762 763 764 * 765	X-3358-207-2 X-3358-202-1 3-358-259-01	SLIDER (LOCK PLATE) CHASSIS (A) ASSY LEVER (FR ARM) ASSY SLIDER (REC) (DECK B) LEVER (REC SAFETY) (DECK B)	
* 756 * 757 758 759 * 760	3-358-261-02 3-701-437-01 X-3358-205-1	LEVER (PAUSE LEVER) SLIDER (HOLDER LOCK) WASHER FLY WHEEL (A) ASSY BRACKET (A) ASSY		766 766 767 768 769	3-358-233-01 3-319-224-51 3-358-230-01	SPRING (LOCK), TORSION (DECK A) SPRING (REC-LOCK), TORSION (DECK I DAMPER, SMALL BELT (A1) LEVER (MOTOR LEVER)	В)

5-5. MECHANISM DECK SECTION 3

(DECK A: TCM-180VA-H6) DECK B: TCM-180VB-H6) not supplied -HP901 (DECK A) -HRP901 (DECK B) # 11-HE901 804. 801-not supplied

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
801 802	3-578-143-11	LEVER (PINCH LEVER) ASSY PINCH ROLLER		814 * 815		SPRING, TORSION LEVER (GB LEVER) (DECK B)	
* 803 804 * 805	3-358-265-01	BUSHING (WIRE KIT RETAINER) SLIDER (HEAD PC BOARD A) PULLEY (COUNTER PULLEY) (DECK B)		* 816 817 818	3-358-207-01	GEAR (FF GEAR) SPRING (FF GEAR), COMPRESSION SPRING. LEAF	
* 806 807 808	3-358-288-11	GUIDE, TAPE (DECK A) SCREW (T), AZIMUTH SPRING (AZIMUTH), COMPRESSION		* 819 * 820	3-358-284-01	GEAR (TU GEAR) LEVER (TU ARM)	
809 810	3-358-288-01	SCREW (T), AZIMUTH GEAR (SUPPLY REEL)		* 821 822 HE901	3-358-243-01	LEVER (SHUT-OFF LEVER) SPRING (TU-SHUT), TORSION HEAD, MAGNETIC (ERASE) (DECK B)	
811 812 * 813	3-358-208-01	TABLE (T) ASSY, REEL SPRING (SUPPLY), COMPRESSION LEVER (TENSION DETECTION ARM)		HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A) HEAD, MAGNETIC (REC/PB) (DECK B)	

LEAF SWITCH (A) LEAF SWITCH (B)

MAIN

SECTION 6 ELECTRICAL PARTS LIST

NOTE:

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque $\hat{\Lambda}$ sont critiques pour la sécurité.

Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
 All resistors are in ohms
 METAL: Metal-film resistor
 METAL OXIDE: Metal Oxide-film resistor

F: nonflammable

- SEMICONDUCTORS
 In each case, u: μ, for example:
 uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
 uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS uF : μ F
- COILS uH : μH
- Abbreviation
 CND : Canadian mo

CND: Canadian model AUS: Australian model

name.										
Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description			Remark
*	1-655-679-13	LEAF SWITCH (A) BOARD **********			*	A-2007-307-A	MAIN BOARD, COM ********			
C10	1-162-306-11	< CAPACITOR > CERAMIC 0.01ul	30%	16V	*	A-2007-308-A	MAIN BOARD, COM ********	•	*	
CIO	1 102 000 11	< CONNECTOR >	30%	101	*	A-2007-309-A	MAIN BOARD, COM ********			
* CNP501	1-564-499-11	PIN, CONNECTOR 6P			*	A-2007-392-A	MAIN BOARD, COM ********			
S901	1-571-736-11	<pre>< SWITCH > SWITCH, LEAF (MOTOR)</pre>					< CAPAÇITOR >			
S902		SWITCH, LEAF (PLAY)			C101 C102	1-162-290-31 1-136-157-00		470PF 0. 022uF	10% 5%	50V 50V
		**********	*********	******	C103 C104	1-124-767-00 1-162-290-31	CERAMIC	2. 2uF 470PF	20% 10%	50V 50V
*	1-655-679-13	LEAF SWITCH (B) BOARD ***********			C105 C106	1-124-443-00 1-136-157-00		100uF 0. 022uF	20%	10V
		< CAPACITOR >			C107 C108	1-124-767-00 1-124-907-11	ELECT	0. 022ur 2. 2uF 10uF	5% 20% 20%	50V 50V 50V
C10	1-162-306-11	CERAMIC 0.01uF	30%	16V	C111 C115	1-130-479-00 1-162-289-31		0. 0047uF 390PF	5% 10%	50V 50V
* CNP502	1-564-500-11	PIN, CONNECTOR 7P			C121 C122	1-124-927-11 1-124-907-11		4. 7uF 10uF	20% 20%	100V 50V
		< SWITCH >			C123 C124	1-136-165-00 1-136-163-00	FILM FILM	0. 1uF 0. 068uF	5% 5%	50V 50V
S903 S904		SWITCH, LEAF (MOTOR) SWITCH, LEAF (PLAY)			C125 C126	1-124-907-11 1-126-803-11		10uF 47uF	20%	50V 10V
S905		SWITCH, LEAF (REC)			C128 C131	1-162-600-11 1-124-927-11	CERAMIC	0. 0047uF 4. 7uF	30% 20%	16V 16V 100V
******	********	*********	********	******	C132 C133	1-124-902-00 1-124-927-11		0. 47uF 4. 7uF	20% 20%	50V 100V
					C134 C137 C138 C151 C152	1-124-907-11 1-162-284-31 1-136-433-11 1-124-903-11 1-124-927-11	CERAMIC FILM ELECT	10uF 150PF 100PF 1uF 4.7uF	20% 10% 5% 20% 20%	50V 50V 630V 50V 100V
					C171 C201 C202 C203 C204	1-136-439-11 1-162-290-31 1-136-157-00 1-124-767-00 1-162-290-31	CERAMIC FILM ELECT	330PF 470PF 0. 022uF 2. 2uF 470PF	5% 10% 5% 20% 10%	630V 50V 50V 50V 50V

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Descri	ption			Remark
C205	1-124-443-00	ELECT	100uF	20%	10V	C712	1-124-443-00	ELECT		100uF	20%	10V
C206	1-136-157-00		0. 022uF	5%	50V							
C207	1-124-767-00		2. 2uF	20%	50 V			< CON	NECTOR >			
C208	1-124-907-11		10uF	20%	50V							
C211	1-130-479-00	MYLAR	0.0047uF	5%	50V	CN503	1-506-468-11	PIN, (CONNECTOR	3P		
*							1-568-951-11					
C215	1-162-289-31	CERAMIC	390PF	10%	50V	* CN511	1-564-705-11	PIN, (CONNECTOR	(SMALL TY	PE) 3P	
C221	1-124-927-11	ELECT	4. 7uF	20%	100V	* CN512	1-564-708-11	PIN, (CONNECTOR	(SMALL TY	PE) 6P	
C222	1-124-907-11	ELECT	10uF	20%	50V	* CN513	1-564-704-11	PIN, (CONNECTOR	(SMALL TY	PE) 2P	
C223	1-136-165-00	FILM	0. 1uF	5%	50V							
C224	1-136-163-00	FILM	0.068uF	5%	50V		1-506-468-11					
							1-580-230-31) 2P	
C225	1-124-907-11	ELECT	10uF	20%	50V		1-573-565-11					
C226	1-124-604-00	ELECT	330uF	20%	10V	CN801	1-568-838-11	SOCKE:	r, connect	OR 21P		
C228	1-162-600-11	CERAMIC	0.0047uF	30%	16V	* CNP505	1-535-115-00	TERMII	VAL			
C231	1-124-927-11	ELECT	4. 7uF	20%	100V							
C232	1-124-902-00	ELECT	0. 47uF	20%	50V	CNP801	1-568-838-11	SOCKE:	r, connect	OR 21P		
C233	1-124-927-11	ELECT	4. 7uF	20%	100V			< DIO	DE >			
C234	1-124-907-11		10uF	20%	50V					<i></i>		
C237	1-162-284-31		150PF	10%	50V	D101	8-719-304-37			(RED) (PEA		
C238	1-136-433-11	FILM	100PF	5%	630V	D102	8-719-304-37			(RED) (PEA		
C251	1-124-903-11	ELECT	1uF	20%	50 V	D103	8-719-304-37			(RED) (PEA		,
						D104	8-719-304-37			(RED) (PEA		
C252	1-124-927-11		4. 7uF	20%	100V	D105	8-719-304-37	LED	SEL4414E	(RED) (PEA	K LEVEL	METER)
C271	1-136-439-11		330PF	5%	630V					/a====> /=		
C302	1-124-907-11		10uF	20%	50V	D106	8-719-304-32			(GREEN) (P		
C402	1-124-907-11		10uF	20%	50V	D107	8-719-304-32			(GREEN) (P		
C501	1-124-907-11	ELECT	10uF	20%	50V	D201	8-719-304-37			(RED) (PEA		
				000/		D202	8-719-304-37			(RED) (PEA		
C502	1-124-907-11		10uF	20%	50V	D203	8-719-304-37	LED	SEL4414E	(RED) (PEA	K LEVEL	MEIER)
C503	1-124-925-11		2. 2uF	20%	100V	D004	0 710 004 07	LDD	OPI 4414P	(DED) (DEA	v rever	METED)
C504	1-124-902-00		0. 47uF	20%	50V	D204	8-719-304-37			(RED) (PEA		
C505	1-124-907-11		10uF	20%	50V	D205	8-719-304-37			(RED) (PEA (GREEN) (P		
C521	1-124-90200	ELECI	0. 47uF	20%	50V	D206 D207	8-719-304-32 8-719-304-32			(GREEN) (P		
0500	1 100 055 10	MVI AD	2200DE	5%	200V	D501	8-719-304-32			. , ,	DAK LEVI	EL METER)
C522	1-106-355-12		3300PF			D201	9-119-901-03	DIODE	11141401	n.		
C523	1-106-355-12		3300PF	5% 5%	200V 100V	DE 0.0	8-719-987-63	DIODE	1N4148N	A		
C524	1-106-365-00		0. 0082uF 1uF	5% 5%	50V	D502 D503	8-719-987-63		1N4148N			
C525	1-136-177-00 1-124-927-11		4. 7uF	20%	100V	D503	8-719-987-63		1N4148N			
C526	1-124-921-11	ELECI	4. fur	20/0	1001	D504 D505	8-719-987-63		1N4148N			
C527	1-124-907-11	EI ECT	10uF	20%	50 V	D505	8-719-987-63		1N4148N			
C528	1-136-562-11		0. 0082uF	5%	630V	D000	0 110 001 00	DIODD	1111110	1		
C528	1-136-601-11		0. 0002ur 0. 01uF	5%	630V	D507	8-719-987-63	DIODE	1N4148N	4		
C529 C530	1-136-601-11		220uF	20%	25V	D508	8-719-987-63		1N4148N			
C531	1-124-907-11		10uF	20%	50V	D509	8-719-987-63		1N4148N			
0001	1 124 501 11	DDDC1	Tour	2070	001	D510	8-719-987-63		1N4148N			
C532	1-136-174-00	FILM	0.56uF	5%	50V	D511	8-719-987-63		1N4148N			
C701	1-124-557-11		1000uF	20%	25V	2011	0 120 001 00	21022	21,1210	•		
C702	1-124-557-11		1000uF	20%	25V	D701	8-719-024-99	DIODE	11ES2-N	NTA2B		
C704	1-124-120-11		220uF	20%	25V	D702	8-719-024-99		11ES2-N			
C705	1-124-120-11		220uF	20%	25V	D703	8-719-024-99		11ES2-N			
0100	1 101 100 11					D704	8-719-024-99		11ES2-N			
C706	1-124-903-11	ELECT	1uF	20%	50V	D705	8-719-000-75		UZL-7L1			
C707	1-124-473-11		1000uF	20%	10V		/ •					
C708	1-124-472-11		470uF	20%	10V	D706	8-719-987-63	DIODE	1N4148N	A .		
C710	1-124-927-11		4. 7uF	20%	100V	D710	8-719-024-99		11ES2-N			
C711	1-124-119-00		330uF	20%	16V	D711	8-719-024-99		11ES2-N			
						D712	8-719-024-99	DIODE	11ES2-N	NTA2B		

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description			Remark
D713	8-719-933-47	DIODE HZS7B2L		Q505	8-729-900-89		DTC144ES		
				Q506	8-729-900-65		DTA144ES		
D714	8-719-933-33			Q507	8-729-900-65	TRANSISTOR	DTA144ES		
D715	8-719-987-63	DIODE 1N4148M		Q508	8-729-900-65	TRANSISTOR	DTA144ES		
D716	8-719-987-63	DIODE 1N4148M		Q509	8-729-119-78	TRANSISTOR	2SC2785-HFE		
D717	8-719-987-63	DIODE 1N4148M							
D801	8-719-987-63	DIODE 1N4148M		Q510	8-729-119-78	TRANSISTOR	2SC2785-HFE		
				Q511	8-729-900-89		DTC144ES		
D802	8-719-987-63	DIODE 1N4148M		Q512	8-729-900-89		DTC144ES		
D803	8-719-987-63			Q601	8-729-900-65		DTA144ES		
D804	8-719-987-63			Q602	8-729-119-78		2SC2785-HFE		
D811	8-719-302-46			4002	0 120 110 10	TIMISTOTOR	25C2105 HFE		
D812	8-719-302-46	, ,		Q603	8-729-142-46	TDANCICTOD	2SC2001-LK		
0012	0 113 502 40	DIODD SEETZ103 C (NORMAL)							
D813	8-719-302-46	DIODE SEL1210S-C (RECORD)		Q604 Q701	8-729-142-46		2SC2001-LK		
D013	0 115 302-40	DIODE SELIZIOS-C (RECORD)		-	8-729-119-78		2SC2785-HFE		
		(10)		Q702	8-729-119-78		2SC2785-HFE		
		< IC >		Q703	8-729-141-83	TRANSISTOR	2SB1094-LK		
IC101	8-759-111-44	IC uPC4570C-1		Q704	8-729-119-76	TRANSISTOR	2SA1175-HFE		
IC102	8-759-111-44	IC uPC4570C-1		Q705	8-729-119-76		2SA1175-HFE		
	8-759-000-49			Q706	8-729-209-15		2SD2012		
	8-752-060-46			4,00	0 120 200 10	TIMEOTOTOR	2002012		
						< RESISTOR >			
10100	0 102 000 02	TO CAMPOTOR				\ KLSISIOK /			
TC106	8-759-634-51	IC M5218AP		R101	1-247-889-00	CARRON	270K 5%	1/4W	
	8-759-079-42			R102	1-249-404-00		82 5%		D
	8-759-912-79			R102	1-249-426-11			1/4W	r
	8-759-912-79			R103	1-249-420-11		5.6K 5%	1/4W	
	8-759-040-01			R104			120K 5%	1/4W	
10301	0-755-040-01	TC WC14001BCr		K105	1-247-889-00	CARBON	270K 5%	1/4W	
IC502	8-759-140-11	IC uPD4011BC		R106	1-249-433-11	CARBON	22K 5%	1/4W	
				R107	1-247-807-31		100 5%	1/4W	
		< JACK >		R108	1-249-426-11		5. 6K 5%	1/4W	
				R109	1-247-881-00		120K 5%	1/4W	
J501	1-568-519-41	JACK, LARGE TYPE (PHONES)		R110	1-247-856-00		120K 5%		
J701		JACK, PIN 4P (LINE)		KIIO	1 247 050-00	CANDON	11W 5%	1/4W	
0101	1 000 200 11	onon, i'ii (Eine)		R111	1-249-431-11	CAPRON	15K 5%	1/4W	
		< COIL >		R112	1-247-887-00				
		COIL /					220K 5%	1/4W	ъ
L101	1-410-781-11	INDUCTOR 33mH		R113	1-249-417-11		1K 5%	1/4W	r
				R114	1-249-433-11		22K 5%	1/4₩	
L201	1-410-781-11	INDUCTOR 33mH		R120	1-249-434-11	CARBON	27K 5%	1/4W	
		< FILTER >		R122	1-247-850-11	CARBON	6. 2K 5%	1/4W	
				R123	1-249-421-11		2. 2K 5%	1/4W	F
LPF101	1-233-275-11	FILTER, LOW PASS		R124	1-249-421-11		2. 2K 5%	1/4W	
		FILTER, LOW PASS		R125	1-249-429-11		10K 5%	1/4W	r
D11201	. 1 200 270 11	TIBIBIT, BOW TROO		R126	1-249-423-11		3. 3K 5%		D.
		< TRANSISTOR >	:	N120	1 243 423 11	CARDON	3. JA 3/0	1/4W	г
				R127	1-249-421-11	CARBON	2.2K 5%	1/4W	F
Q101	8-729-900-89	TRANSISTOR DTC144ES	'	R128	1-249-409-11	CARBON	220 5%	1/4W	
Q102	8-729-119-78			R129	1-249-425-11		4. 7K 5%	1/4₩	
Q103	8-729-119-78			R130	1-249-417-11		1K 5%	1/4W	
Q201	8-729-900-89			R131	1-249-430-11		12K 5%	1/4W	•
Q202	8-729-119-78				- min 400 II	OHILDON.	1211 370	1/41	
*	10			R141	1-249-428-11	CARBON	8.2K 5%	1/4W	F
Q203	8-729-119-78	TRANSISTOR 2SC2785-HFE		R142	1-249-424-11		3.9K 5%	1/4W	
Q501	8-729-900-65			R143	1-249-429-11		10K 5%	1/4W	•
Q502	8-729-119-78			R144	1-249-421-11		2. 2K 5%	1/4W	F
Q503	8-729-900-74			R145	1-249-424-11		3. 9K 5%	1/4W	
Q504	8-729-900-80			1/140	1 220 724 11	OINDON	3. JL 3/0	1/47	ī
4007	5 ,20 000 00		•						

D.C.N	D . N	D				D 1	D C N	D 4 N					D 1
Ref. No.	Part No.	Description		•		Remark	Ref. No.	Part No.	Description				Remark
R146	1-249-409-11		220	5%	1/4W	F	R510	1-247-807-31		100	5%	1/4W	
R151	1-247-840-00		2. 4K	5%	1/4W		R511	1-249-437-11		47K	5%	1/4W	
R153	1-249-441-11		100K	5%	1/4W		R512	1-249-393-11		10	5%	1/4W	F
R154	1-247-883-00		150K	5%	1/4W		R513	1-249-437-11		47K	5%	1/4W	_
R155	1-249-433-11	CARBON	22K	5%	1/4W		R514	1-249-417-11	CARBON	1K	5%	1/4W	F
R171	1-249-439-11	CARBON	68K	5%	1/4W		R521	1-249-429-11	CARBON	10K	5%	1/4W	
R201	1-247-889-00	CARBON	270K	5%	1/4W		R522	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R202	1-249-404-00		82	5%	1/4W	F	R523	1-249-440-11	CARBON	82K	5%	1/4W	
R203	1-249-426-11		5.6K	5%	1/4W		R524	1-249-429-11		10K	5%	1/4W	
R204	1-247-881-00	CARBON	120K	5%	1/4₩		R525	1-247-862-11	CARBON	20K	5%	1/4W	
R205	1-247-889-00	CARBON	270K	5%	1/4W		R530	1-215-455-00	METAL	27K	1%	1/4W	
R206	1-249-433-11	CARBON	22K	5%	1/4W		R531	1-249-437-11	CARBON	47K	5%	1/4W	
R207	1-247-807-31	CARBON	100	5%	1/4W		R541	1-249-421-11	CARBON	2. 2K	5%	1/4W	F
R208	1-249-426-11	CARBON	5.6K	5%	1/4W		R542	1-247-811-31	CARBON	150	5%	1/4W	
R209	1-247-881-00	CARBON	120K	5%	1/4W		R543	1-249-421-11	CARBON	2. 2K	5%	1/4W	F
R210	1-247-856-00	CARBON	11K	5%	1/4W		R544	1-247-811-31		150	5%	1/4W	
R211	1-249-431-11		15K	5%	1/4W		R551	1-249-429-11	CARBON	10K	5%	1/4W	
R212	1-247-887-00		220K	5%	1/4W		R552	1-249-417-11	-	1K	5%	1/4W	F
R213	1-249-417-11		1K	5%	1/4W	F	R553	1-249-435-11		33K	5%	1/4W	
R220	1-249-434-11	CARBON	27K	5%	1/4W		R554	1-249-435-11	CARBON	33K	5%	1/4W	
R222	1-247-850-11	CARBON	6. 2K	5%	1/4W		<u></u> 1 1 1 1 1 1 1 1 1 1	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R223	1-249-421-11		2. 2K	5%	1/4W		<u></u> 1. ₹R556	1-212-849-00		4.7	5%	1/4W	F
R224	1-249-421-11		2. 2K	5%		F	R560	1-249-417-11		1K	5%	1/4W	F
R225	1-249-429-11		10K	5%	1/4W		R561	1-249-429-11		10K	5%	1/4W	
R226	1-249-423-11	CARBON	3. 3K	5%	1/4W	F	R591	1-215-452-00	METAL	20K	1%	1/4W	
R227	1-249-421-11		2. 2K	5%		F	R592	1-247-807-31		100	5%	1/4W	
R228	1-249-409-11		220	5%	1/4W	F	R701	1-249-421-11		2. 2K	5%	1/4W	F
R229	1-249-425-11		4.7K	5%		F	R702	1-249-421-11		2. 2K	5%	1/4W	F
R230	1-249-417-11		1K	5%		F	R703	1-249-421-11		2. 2K	5%	1/4₩	F
R231	1-249-430-11	CARBON	12K	5%	1/4W		R704	1-249-421-11	CARBON	2. 2K	5%	1/4W	F.
R241	1-249-428-11		8.2K	5%	1/4W		R705	1-249-417-11		1K	5%	1/4W	F
R242	1-249-424-11			5%	1/4W	F	R706	1-249-423-11		3. 3K	5%	1/4W	F
R243	1-249-429-11		10K	5%	1/4W		R707	1-249-424-11		3.9K	5%	1/4W	F
R244	1-249-421-11		2. 2K	5%		F .	R710	1-249-421-11		2.2K	5%	1/4W	F
R245	1-249-424-11	CARBON	3. 9K	5%	1/4W	F	R711	1-249-417-11	CARBON	1K	5%	1/4W	F
R246	1-249-409-11		220	5%	1/4W	F	R712	1-249-417-11		1K	5%	1/4W	F
R251	1-247-840-00		2. 4K		1/4W		R713	1-249-433-11		22K	5%	1/4W	_
R253	1-249-441-11		100K		1/4W		R714	1-249-421-11		2. 2K	5%	1/4W	
R254	1-247-883-00		150K		1/4W		R715	1-249-421-11		2. 2K	5%	1/4W	
R255	1-249-433-11	CARBON	22K	5%	1/4W		R801	1-249-408-11	CARBON	180	5%	1/4W	F
R271	1-249-439-11	CARBON	68K	5%	1/4W		R811	1-249-412-11	CARBON	390	5%	1/4W	F
R501	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R812	1-249-413-11	CARBON	470	5%	1/4W	F
R502	1-249-425-11		4.7K	5%	1/4W	F	R813	1-249-413-11		470	5%	1/4W	F
R503	1-249-437-11		47K		1/4W		R821	1-249-430-11	CARBON	12K	5%	1/4W	
R504	1-249-429-11	CARBON	10K	5%	1/4W		R822	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R505	1-249-425-11	CARBON	4.7K		1/4W	F	R823	1-249-421-11	CARBON	2. 2K	5%	1/4W	F
R506	1-249-435-11		33K		1/4W								
R507	1-249-431-11		15K		1/4W				< VARIABLE RESIS	STOR >			
R508	1-249-437-11		47K		1/4W								
R509	1-249-433-11	CARBON	22K	5%	1/4₩				RES, ADJ, CARBOI				
							KVIUZ	1-241-030-11	RES, ADJ, CARBO	N TOK			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

Les composants identifiés par une marque 🛧 sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
RV151	1-241-767-21	RES, ADJ, CARBON 10K RES, ADJ, CARBON 100K RES, ADJ, CARBON 10K				S & PACKING MATERIALS *******	
RV202 RV203 RV251 RV501	1-241-630-11 1-241-630-11 1-241-767-21 1-241-761-11	RES, ADJ, CARBON 10K RES, ADJ, CARBON 10K RES, ADJ, CARBON 100K RES, ADJ, CARBON 1K RES, ADJ, CARBON 1K		*	3-376-136-01 3-759-823-11	CORD, CONNECTION (AUDIO 108cm) CUSHION (HALF) MANUAL, INSTRUCTION (EGLISH, FRENCH, SPANISH, PORTUGUESE MANUAL, INSTRUCTION (ENGLISH) (US,	E) (AEP, E) CND, AUS)
RV504	1-241-761-11	RES, ADJ, CARBON 1K RES, ADJ, CARBON 1K RES, VAR, CARBON 20K/20K (REC LEV < SWITCH >	/EL)	*	3-759-823-41 3-759-823-51 3-912-048-01	MANUAL, INSTRUCTION (FRENCH) (CNU MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALI MANUAL, INSTRUCTION (CHINESE) (E) CUSHION INDIVIDUAL CARTON (US, CND, E, AUS)	IAN) (AEP)
S701 S801 S802 S803 S804	1-762-252-11 1-762-251-11 1-554-118-00	SWITCH, PUSH (1 KEY) (POWER) SWITCH, SLIDE (DOLBY NR) SWITCH, SLIDE (TAPE TYPE DECK A) SWITCH, PUSH (1 KEY) (DUBBING SPEE SWITCH, SLIDE (TAPE TYPE DECK B)	ED)	*******	3-921-800-71	INDIVIDUAL CARTON (AEP) ****************** ***************	
T501 *****		<pre>< TRANSFORMER > TRANSFORMER, BIAS OSCILLATION ************************************</pre>	******	#1 #2 #3 #4	7-682-548-04 7-685-871-01	**************** SCREW +BVTT 3X6 (S) SCREW +BVTT 3X8 (S) SCREW +BVTT 3X6 (S) SCREW (+ PTPWH) (2.6X8)	
		MISCELLANEOUS ***********		#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S (E) SCREW +P 2X5 TYPE2 NON-SLIT	
⚠10 ⚠11 ⚠12 ⚠13 ⚠14	1-575-651-21 1-558-943-41 1-696-845-11	CORD, POWER (POLAR SPT-1) (US, CND) CORD, POWER (AEP) CORD, POWER (E) CORD, POWER (AUS) ADAPTER, CONVERSION 2P (E)	•	#7 #8 #9 #10	7-621-775-20 7-685-533-19 7-685-133-19	SCREW +B 2.6X5 SCREW +BTP 2.6X6 TYPE2 N-S SCREW +P 2.6X6 TYPE2 RING, RETAINING, CAPSTAN	
* CNP502 HE901	1-564-499-11 1-564-500-11 1-543-673-11	WIRE (FLAT TYPE) (21 CORE) PIN, CONNECTOR 6P PIN, CONNECTOR 7P HEAD, MAGNETIC (ERASE) (DECK B) HEAD, MAGNETIC (PB) (DECK A)		#11	7-688-001-01	W 2, SMALL	
HRP901 M901 M902 ⚠S101 ҈£T701	X-3358-212-1 X-3358-212-1 1-692-155-11	HEAD, MAGNETIC (REC/PB) (DECK B) MOTOR (A) ASSY (DECK A) MOTOR (B) ASSY (DECK B) SELECTOR, POWER VOLTAGE (E) TRANSFORMER, POWER (US, CND)	• :				
<u>↑</u> T701 <u>↑</u> T701 ******	1-427-779-11	TRANSFORMER, POWER (AEP, AUS) TRANSFORMER, POWER (E) ************************************	******				
				The		1 h 1- X	

The components identified by mark \triangle or dotted line with mark \triangle are marque \triangle sont critiques pour la

critical for safety.
Replace only with part number specified.

sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Sony Corporation Consumer A&V Products Company Home A&V Products Div.

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